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10/067,395	02/05/2002	Jean-Claude Mayet	A34984	7222

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EXAMINER

KNABLE, GREGORY L.

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 01/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 10/067,395	Applicant(s) MAYET, JEAN-CLAUDE
Examiner Geoffrey L. Krable	Art Unit 1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(c).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 04-28-02.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

1. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is intended to be generic to all the various embodiments of the invention – however, it is considered that as presently drafted, this claim actually is inconsistent with several of the embodiments and/or is sufficiently indefinite that it is not clear what the scope of protection is. In particular, claim 1 defines that the oscillating arm comprises a head remote from the first axis of rotation, the head transporting the guiding member directly or indirectly through other arms. The claim also defines that there are means for varying the radial distance from the head to the first axis of rotation. This description however is only considered to be consistent with the fig. 11 embodiment and inconsistent with the other embodiments. In other words, in all the embodiments except the fig. 11 embodiment, the head of the oscillating arm that oscillates about the first axis of rotation is not varied in radial distance from the first axis of rotation. Rather, in these other embodiments, it is the head of the second arm that varies in radial distance from the first axis. Further, while claim 1 does define that there are "at least one" arm oscillating, it does not seem reasonable or consistent with other claims to define that the head being described in claim 1 is the head of a second arm – note for example claim 2 defines a second arm with a head, this being described as a separate element from the previously described head. It would seem that it may be the intent in claim 1 to define that the radial distance that it is being varied is that between the guiding member, or head directly supporting the guiding member, and the first axis

but clarification is required. Note again that in claim 2, directed to embodiments with two arms (e.g. fig. 1), a second arm with a head is defined. This is the head that apparently in fact varies in radial distance from the first axis whereas this would be inconsistent with claim 1 as presently drafted, or in any event, certainly indefinite and confusing in light of what is apparently intended. Clarification is required. Analogous ambiguities to those in claim 1 are present in method claim 19, which at present would only seem consistent with the fig. 11 embodiment whereas it is not believed that this is intended, clarification likewise being required of this claim.

In claim 2, line 6, no antecedent has been established for "the first arm".

In claim 14, lines 3-4, no antecedent has been established for "the second geometrical axis of rotation," this rendering the scope of this claim difficult to interpret.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 18-20 are rejected under 35 U.S.C. 102(e) as anticipated by Ogawa (US 6,623,582).

Ogawa '582 discloses a method and apparatus for producing a tire reinforcement on a toroidal support by laying the reinforcement along a desired path on the support. Further, this reference discloses that the apparatus includes an industrial robot 3a, 3b (fig. 1) that as depicted supports an outlet guide (8) on arms that are operable to oscillate back and forth at least between tread and bead portions of the tire (e.g. fig. 1 and col. 4, lines 8+). Further, pressure means (e.g. 4a, 4b) are also provided at the ends of the deposition path. Further, it would seem readily apparent that means are implicitly present to control operation of the robots. It further would have been readily apparent to the artisan from their depictions that the robot arms rotate or oscillate around an axis of rotation and further that at least the end of the arm carrying the outlet guide "8" must of necessity be capable of varying in radial distance from the further upstream rotation axes of the arms. In other words, as would be readily apparent to the ordinary artisan, the robot arm, in order to follow the irregular shape of the toroidal support, will of necessarily be capable of providing varying distances of the end effector from the rotation axes of at least the first or main arm – such is considered to satisfy the noted claims.

5. Claims 1-4, 7, 13 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa (US 6,623,582) as applied above, and further in view of Megherbi (US 5,159,249).

Ogawa '582 is applied as above. Ogawa '582 suggests that readily available versatile industrial robots be employed but does not provide details thereof. Megherbi has been cited as exemplary of the typical configuration of well known versatile industrial robots – note esp. figs. 1a and 1b, it being obvious to utilize such well known robot configurations in the Ogawa '582 processing. Although claims 1 and 18-20 were considered to be satisfied by Ogawa '582 alone, insofar as this reference only schematically illustrates the robots, it could be argued that this reference does not explicitly suggest arms or robot control. Megherbi however clearly evidences that well known industrial robots are configured with arms controllably rotatable about axes of rotation (e.g. figs. 1a, 1b and col. 1), these claims therefore being obvious even if not anticipated.

As to claims 2-4, 7 and 13, Ogawa '582 does not provide sufficient descriptive or illustrative detail of the robots used therein to consider that the reference is describing two arms as claimed. In light of the fact that the typical versatile industrial robot includes plural arms rotatable about parallel axes (note esp. the shoulder and elbow rotations in figs. 1a, 1b of Megherbi), it however would have been obvious to provide such as required by these claims.


6. Claims 1, 16, 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogawa (US 6,328,836).

Ogawa '836 discloses a method and apparatus for producing a tire reinforcement on a toroidal support by laying the reinforcement along a desired path on the support. Further, this reference discloses that the apparatus includes arms that support an outlet

guide (37 in fig. 5; 115/117 in fig. 24) to oscillate back and forth between bead portions of the toroidal support. Further, pressure means (7, 95) are also provided at the ends of the deposition path. Further, it would have been readily apparent that means are implicitly present to control operation of the arms. As to the claimed varying of the radial distance from a rotation axis of an arm and a head of the arm, insofar as the thread outlet guide in the noted embodiments (i.e. figs. 5-7; figs. 22-24) is described as following the path of the toroidal support in contact therewith, it is considered that the part of the arm that supports the thread outlet can be described as a head which, because of the varying distances along the irregularly shaped tire core, will be located at varying distances from the axis of rotation at 33 in figs. 5-7 and the axis for arm "17" in fig. 24. As to claim 16, note the axis of arm "17" intersects the core. As to claim 18, again, control is considered implicit and the cords are clearly be successively applied. Claims 19-20 are met for the same reasons described with respect to claim 1 above.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.


Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
January 10, 2004